

769-333 Div.  
ITW 8673.78



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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: McMahon et al.  
Serial No.: 10/822,369  
Filed: April 12, 2004  
For: Methods of Making Slide-Zippered Reclosable  
Packages on Horizontal Form-Fill-Seal Machines  
Examiner: John Sipos  
Art Unit: 3721

7 Times Square  
New York, New York 10036  
212-297-5800

**DECLARATION UNDER RULE 131**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

S I R:

Michael J. McMahon does declare as follows:

1. That I am a joint inventor of the above-identified application.
2. That this Declaration is submitted under 37 C.F.R. §1.131 to establish completion of the invention of this application in the United States of America at a date prior to May 11, 1999, that is the effective date of U.S. Patent No. 6,360,513 to Strand et al., which was cited by the

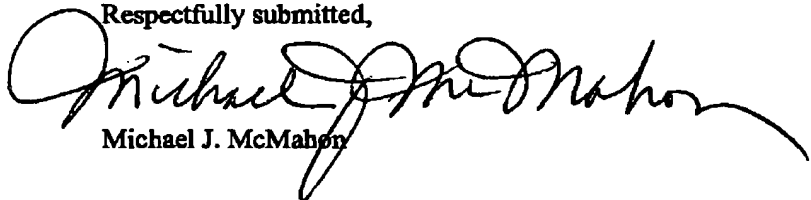
Examiner as prior art against the above-identified application in the non-final Office Action of March 17, 2005.

3. That this Declaration is being submitted as part of the response to said Office Action of March 17, 2005.

4. That the attached drawings and records (with blocked out dates) establish that the invention of the present application was conceived prior to the date of May 11, 1999, and diligently reduced to practice.

5. That I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Michael J. McMahon", with a long, sweeping horizontal flourish extending to the right.

Michael J. McMahon

Pitney Hardin L.L.P.  
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New York, New York 10036-7311  
212-297-5800

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ILLINOIS TOOL WORKS INC.

SUBMISSION OF INVENTION

Division/Subsidiary  
Project Number

H.3254

Patent Dept. Number

TC -001

To: ITW Patent & Trademark Dept.

Title of Invention:

STAND ALONE CONCEPT FOR  
SLIDER ATTACHMENT AFTER PACKAGING MACHINE

Name	Division/Subsidiary	Location
M. McMAHON, et al	ITW Tech CTR	Glenview, IL
A. MALIN, et al	MINIGRID - ZIPPAK	Glenview, IL
ATTENDEES AT CPG	BRAINSTORM Session ON	

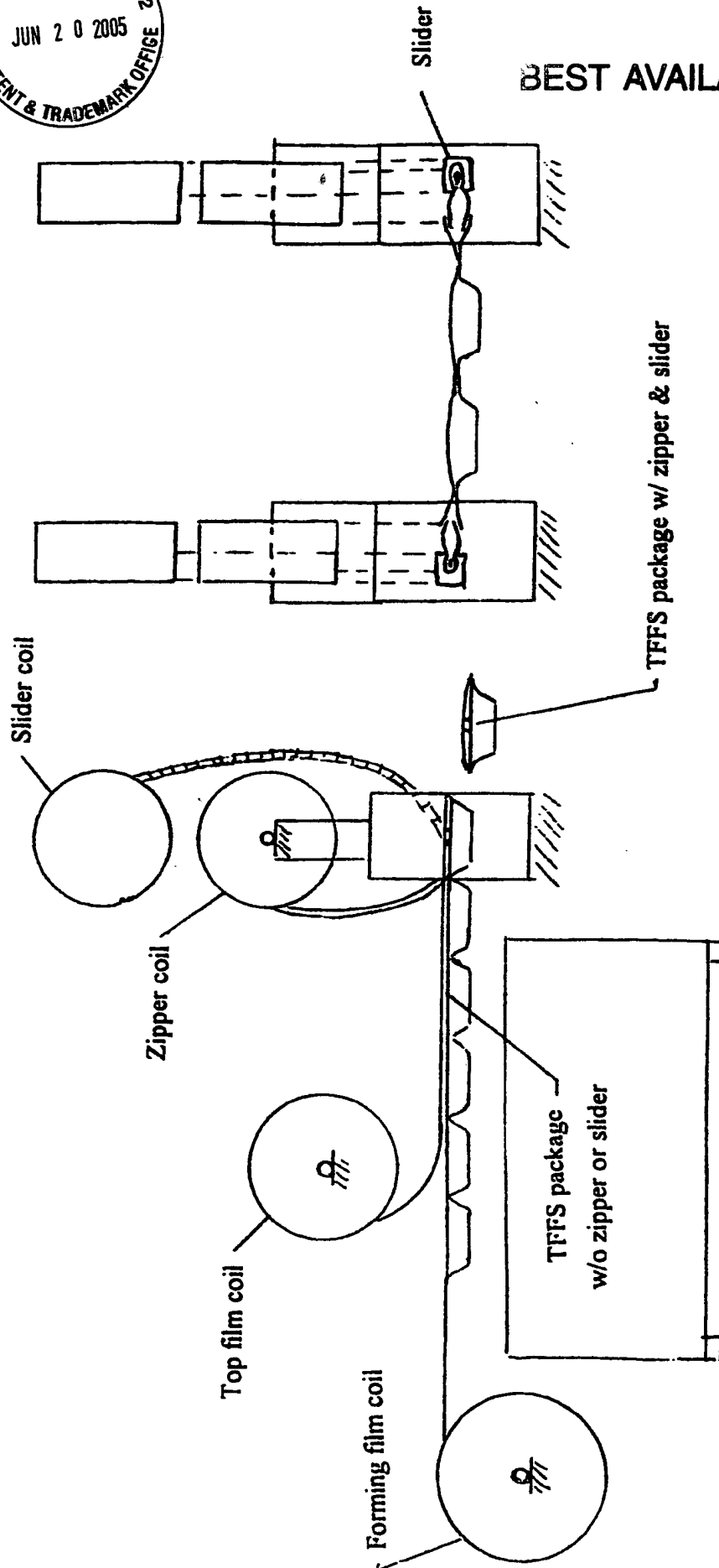
INVENTOR DATA

1. Date I/We thought of the invention was CPG BRAINSTORM Session
2. Attach the original sketch or engineering drawing of the complete idea of the invention, if any.  
Pg. 20 & Pg 2
3. Date I/We first disclosed the invention to others was ATTENDEES of CPG BRAINSTORM Session  
The Disclosure being to
4. Attach a copy of the first written description of the invention, if any.  
Diagrams &  
Pg. 20 & Pg. 21
5. Attach copies of pertinent test and lab reports, if any. NONE
6. Does a model or prototype of the invention exist? No Attach photo, if available.
7. Has the invention been incorporated into a product shown or sold to ITW customers? No When and where first shown or sold?
8. Has the invention been publicized outside the company (i.e. professional society papers, seminars, dealer meetings, trade shows, etc.) No Date publicized \_\_\_\_\_ or was planned?
9. Designate the specific ITW project or product program to which the invention relates or is a part: H32 SLIDER Date of announcement or disclosure to the public of a product from such program NA
10. Was the invention conceived or developed in a joint program with others outside the Company? No If so was the joint program under written contract?

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Stand Alone Concept for Slider Attachment  
on daisy chained TFPS packages

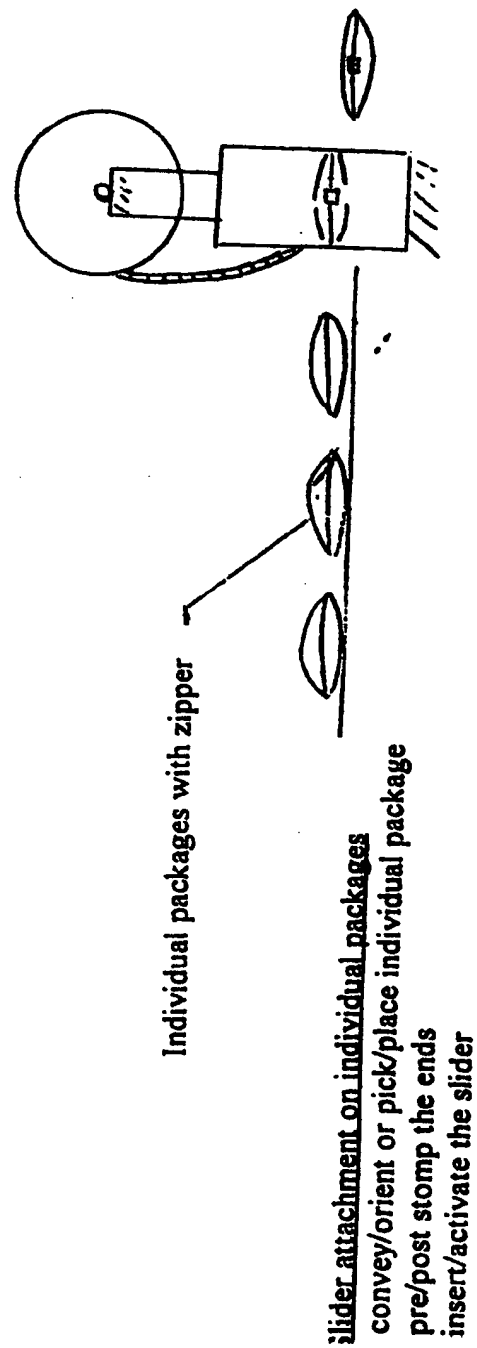
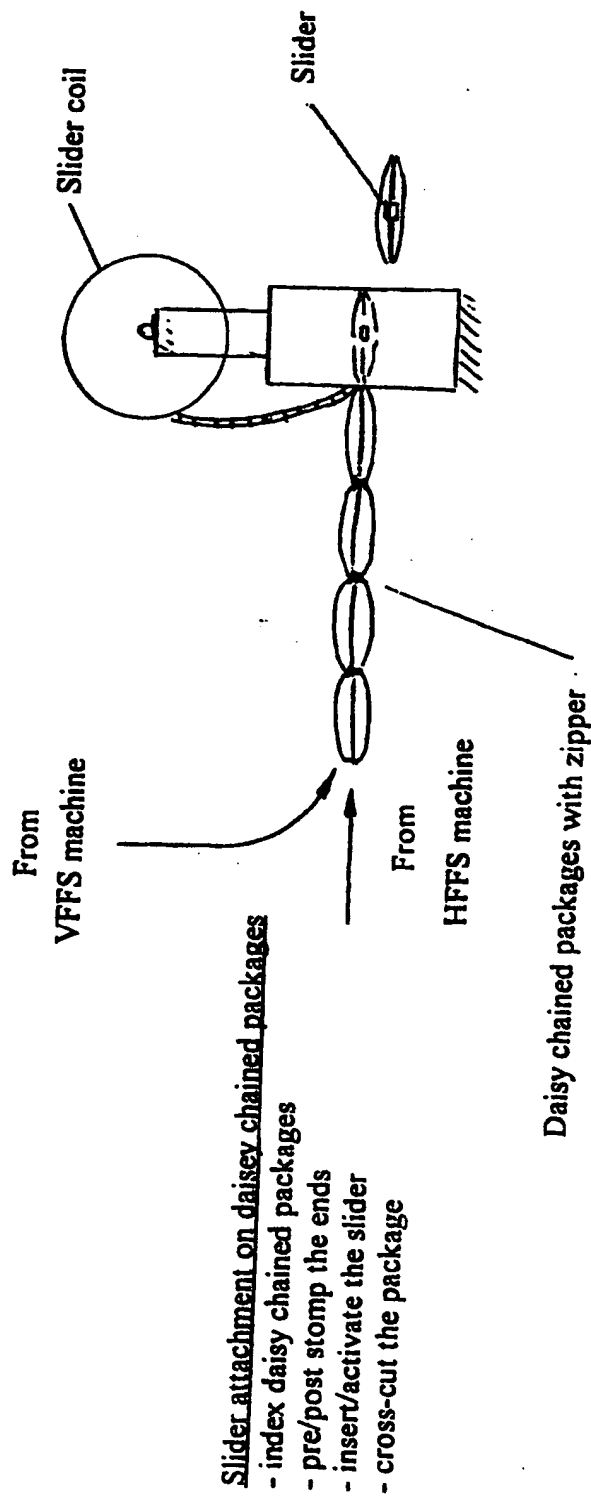


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Slider attachment operation

- index and spread flaps
- seal zipper into flaps
- pre/post stomp the ends
- insert/activate the slider
- slit and cross-cut the packages

# Stand Alone Concept for Slider Attachment on daisy chained or individual FFS packages



ILLINOIS TOOL WORKS INC.

SUBMISSION OF INVENTION

4  
Division/Subsidiary  
Project Number

H3254

To: ITW Patent & Trademark Dept.

Title of Invention:

SLIDER ATTACHMENT CONCEPT

For HVFS PACKAGING MACHINE

Patent Dept. Number

TC -002

RECEIVED

Name	Division/Subsidiary	Location
M. McMahon, et al	ITW TECH CTR	Glenview, IL
A. Malin, et al	Minigrip-Zippak	Glenview, IL
ATTENDEES AT CPG. Brainstorm Session on		

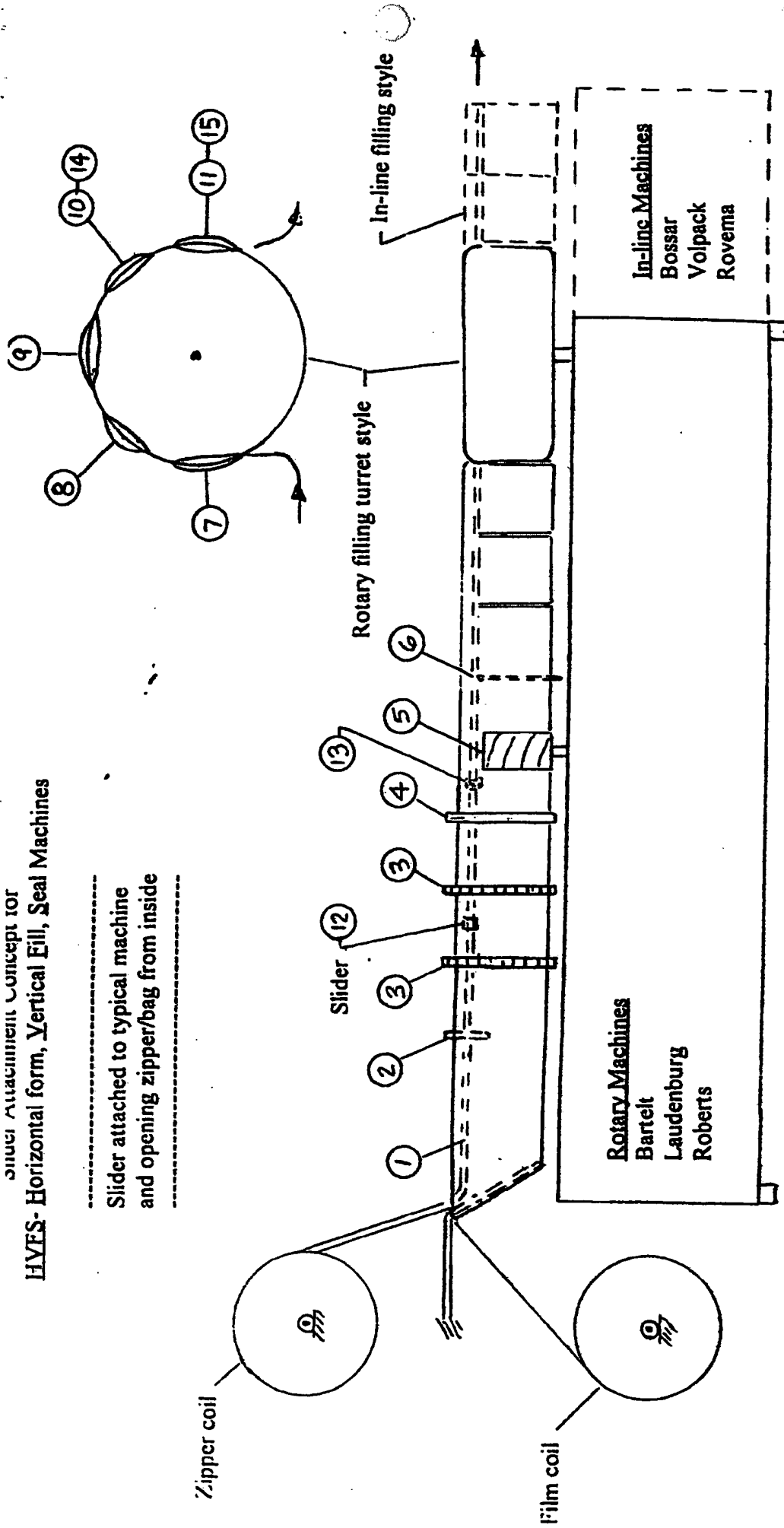
INVENTOR DATA

1. Date I/We thought of the invention was CPG Brainstorm Session
2. Attach the original sketch or engineering drawing of the complete idea of the invention, if any. Pg. 5, Pg 6, Pg 7, P.
3. Date I/We first disclosed the invention to others was ATTENDEES of CPG Brainstorm Session  
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4. Attach a copy of the first written description of the invention, if any. Diagrams & Note Pg. 5, Pg 6, Pg 7, Pg 8.
5. Attach copies of pertinent test and lab reports, if any. NONE
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7. Has the invention been incorporated into a product shown or sold to ITW customers? No When and where first shown or sold?
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10. Was the invention conceived or developed in a joint program with others outside the Company? No If so was the joint program under written contract?

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# Slider Attachment Concept for HVFS- Horizontal form, Vertical Fill, Seal Machines

Slider attached to typical machine  
and opening zipper/bag from inside



## Operations for typical zipper machine

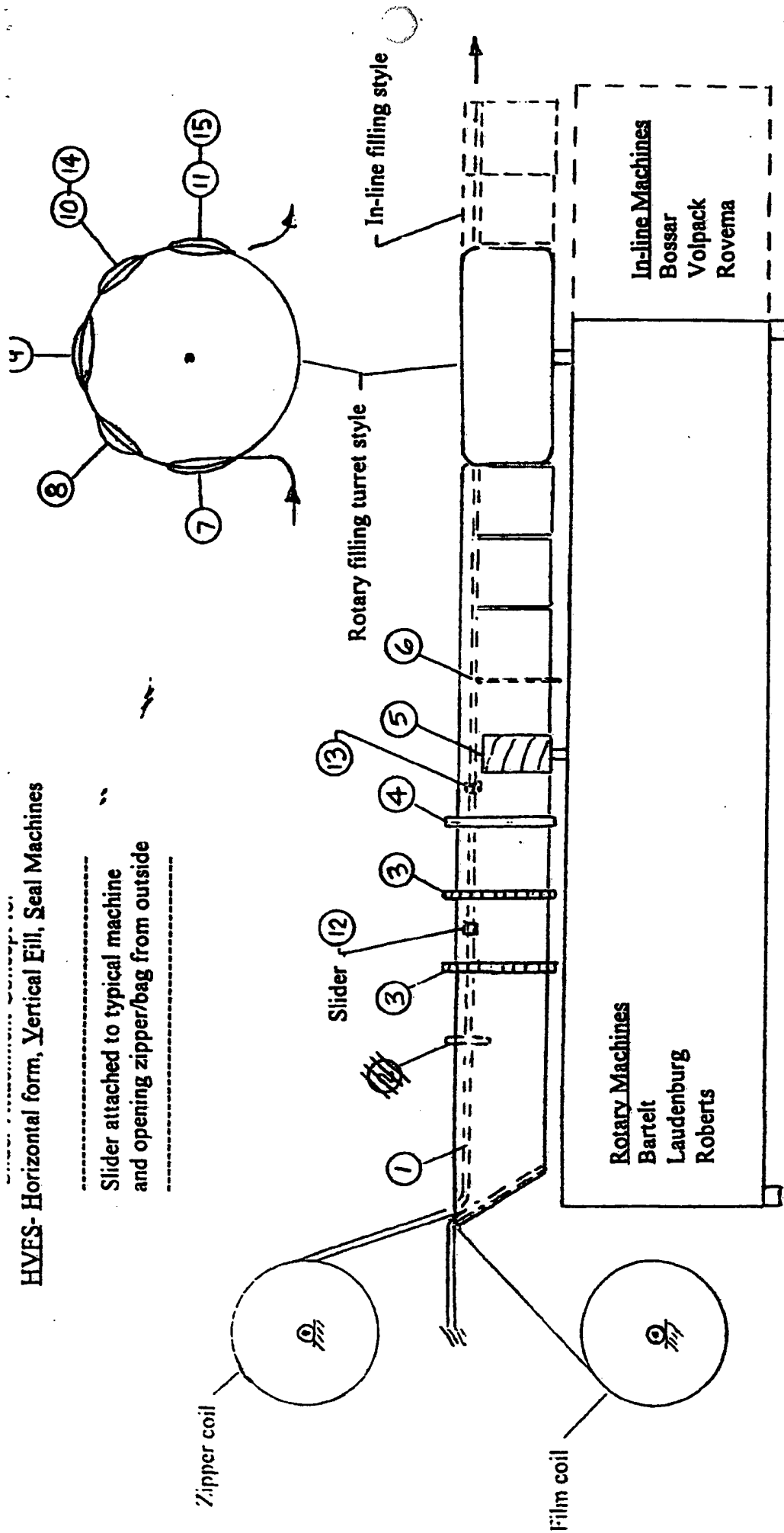
1. Zipper to film
2. Open the zipper
3. Crush zipper
4. Side seal
5. Pull roller drive
6. Cut-off knife
7. Pouch opening
8. Filling
9. Reject detection
10. Optional fill
11. Top seal final

## Slider machine option #1

12. Attach slider prior to folder plow
13. Move slider to open position between 4 & 5
14. Close slider positioning
15. Tamper evident seal

# HVES- Horizontal form, Vertical Fill, Seal Machines

Slider attached to typical machine and opening zipper/bag from outside



## Operations for typical zipper machine

1. Zipper to film
2. Pouch opening
3. Filling
4. Crush zipper
5. Side seal
6. Pull roller drive
7. Cut-off knife

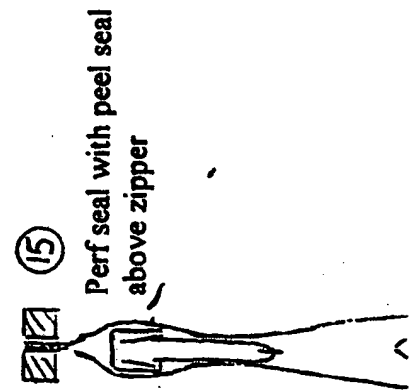
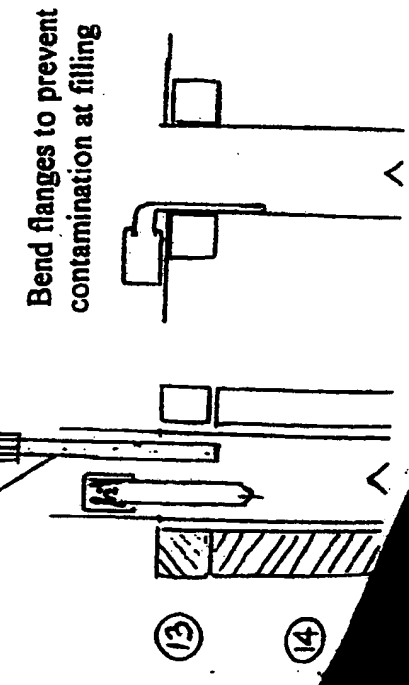
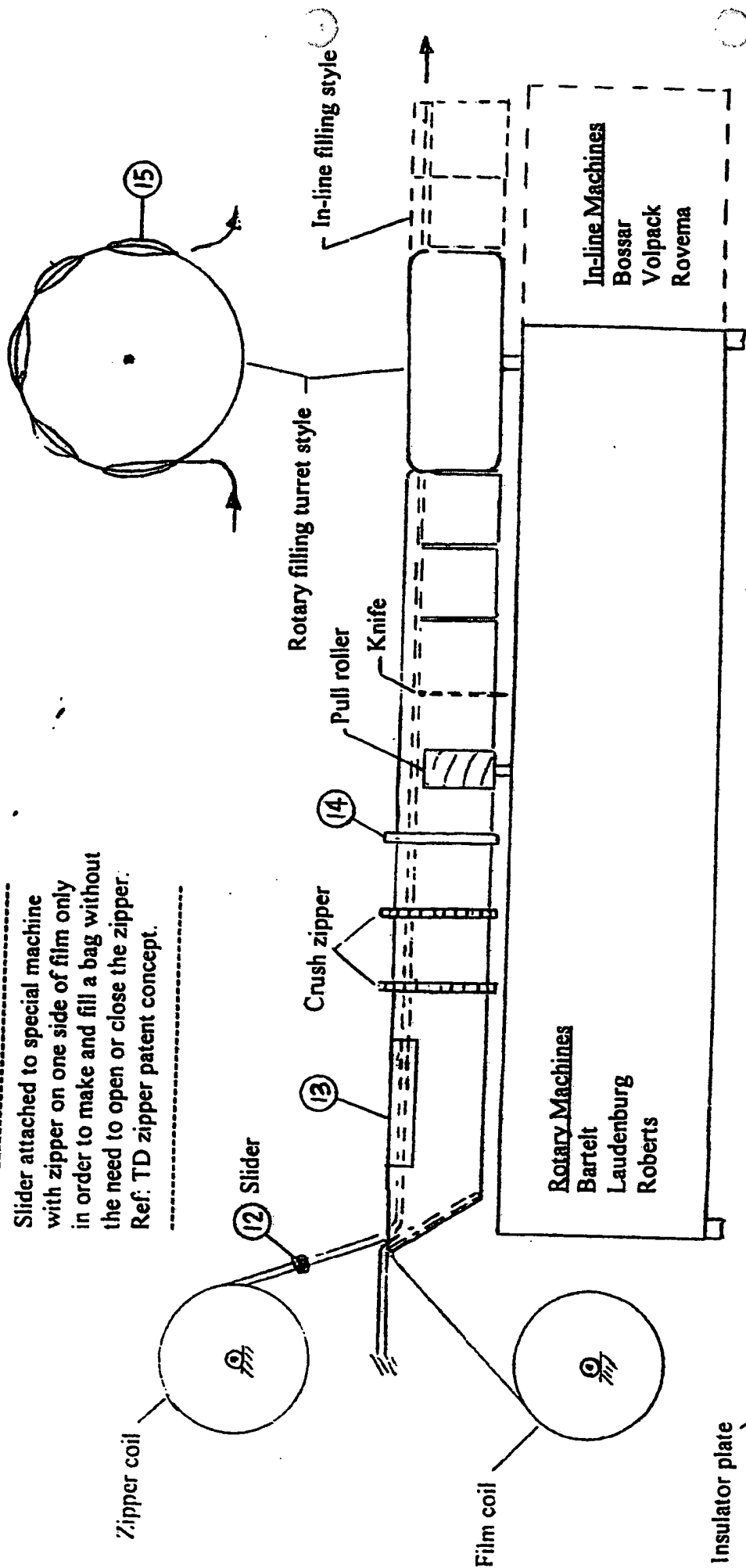
## Slider machine option #2

12. Attach slider on trailing edge
13. Open zipper/bag from outside
14. Move slider to closed position
15. Tamper evident seal



# Slider Attachment Concept for HIVES- Horizontal form, Vertical Fill, Seal Machines

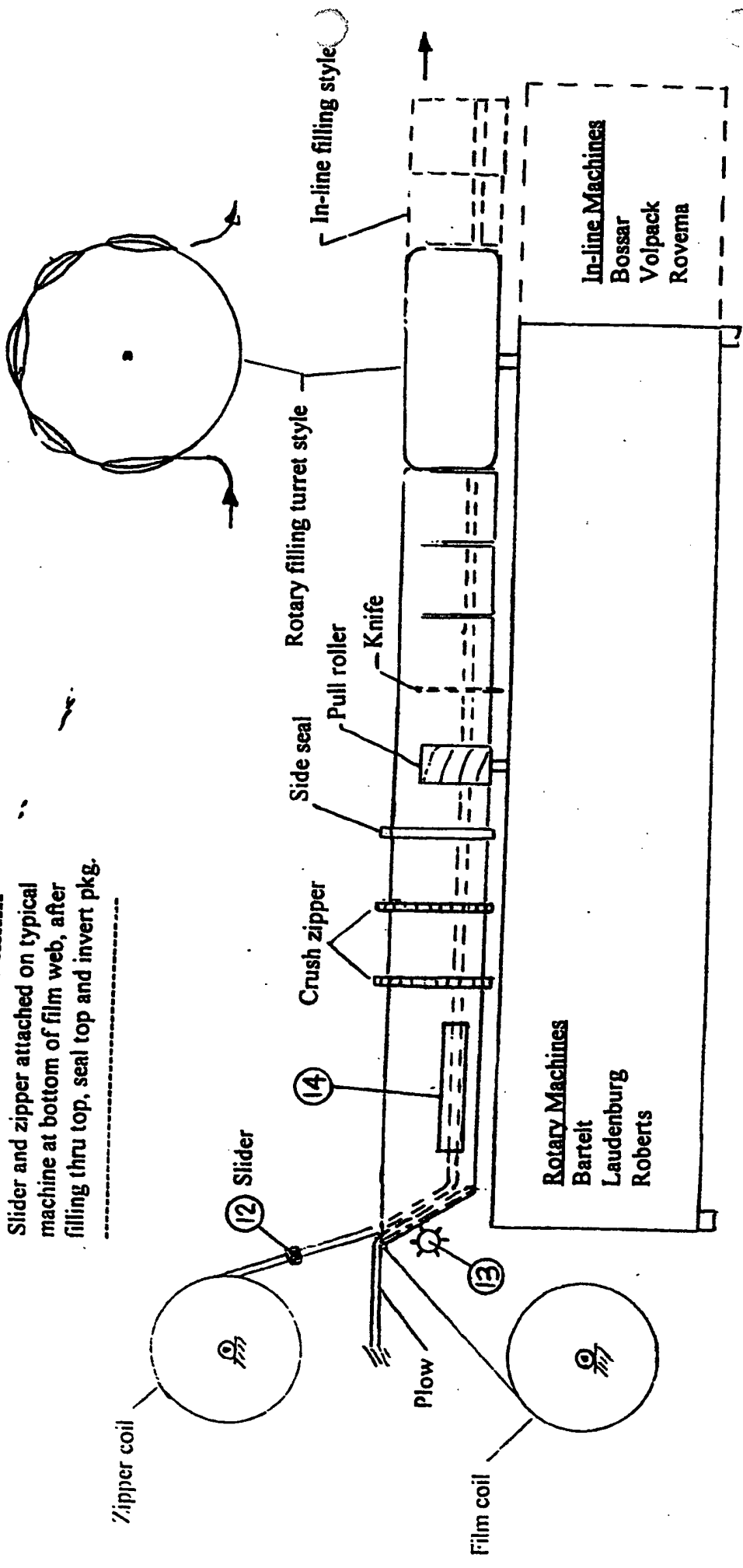
Slider attached to special machine  
with zipper on one side of film only  
in order to make and fill a bag without  
the need to open or close the zipper.  
Ref: TD zipper patent concept.



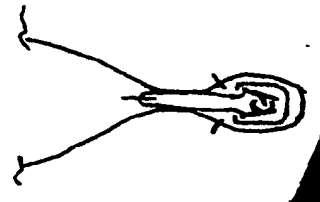
- Slider machine option #3**
- 12. Slider insertion and actuation
  - 13. Seal zipper to one side of film only
  - 14. Side seal film only, not zipper
  - 15. Seal film to other flange, side seal ears

# HVES- Horizontal form, Vertical Fill, Seal Machines

Slider and zipper attached on typical machine at bottom of film web, after filling thru top, seal top and invert pkg.



Reg, Opti-seal, or Z-T Zipper in bottom



- Special Gusset**
- uneven fold or 2<sup>nd</sup> web
  - short side seals
  - fill product
  - fold and seal gusset

## Slider machine option #4

12. Attach and activate slider
13. Perf/score the film web below slider at plow
14. Seal zipper to bottom of film web by welding flanges over perf/score line

ILLINOIS TOOL WORKS INC.

SUBMISSION OF INVENTION

To: ITW Patent & Trademark Dept.

Title of Invention: \_\_\_\_\_

SLIDER ATTACHMENT Concept  
for TFFS PACKAGING MACHINE

Division/Subsidiary  
Project Number

#3254

Patent Dept. Number

TC - 013

Name	Division/Subsidiary	Location
<u>M. McMahon, et al</u>	<u>ITW Tech Ctr</u>	<u>Glenview, IL</u>
<u>A. Malin, et al</u>	<u>MINIGRID - ZIPPAK</u>	<u>Glenview, IL</u>
<u>ATTENDEES AT CPG BRAINSTORM Session on</u>		

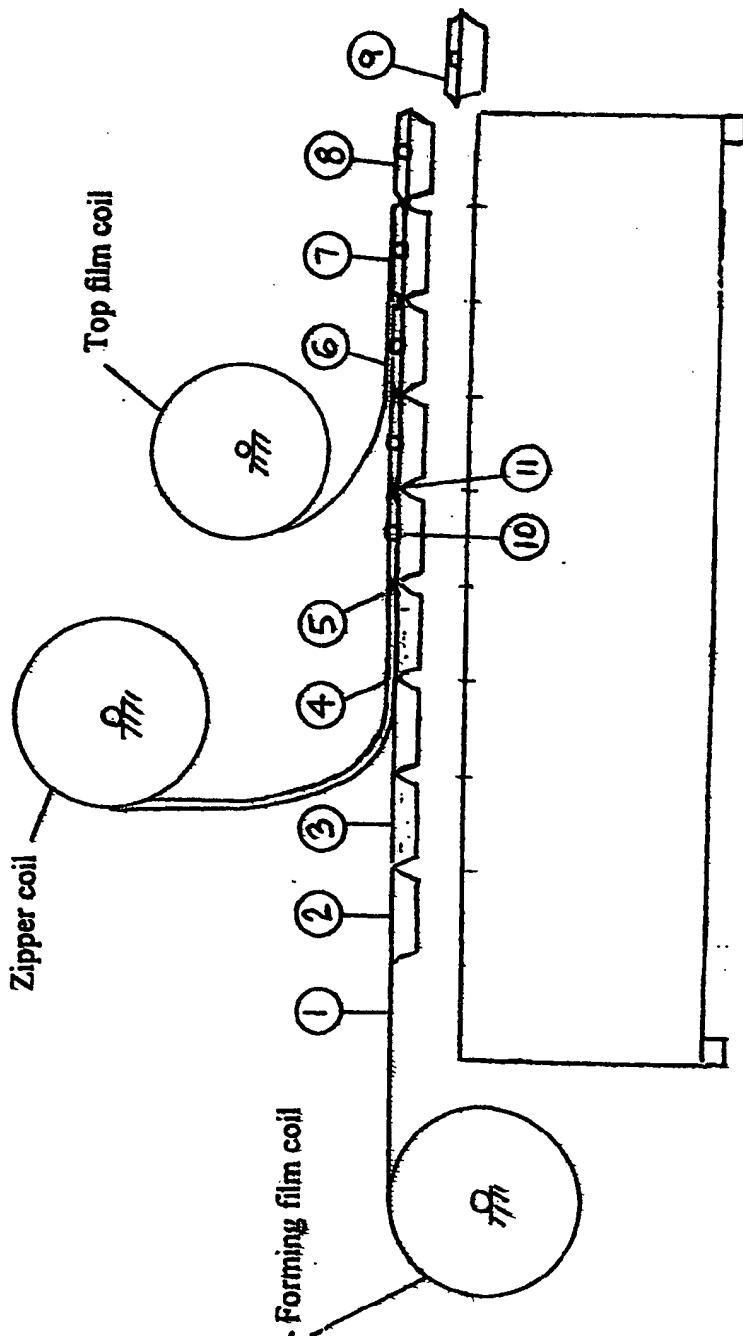
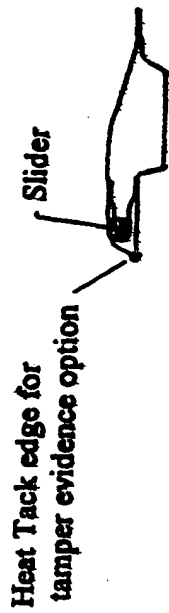
INVENTOR DATA

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3. Date I/We first disclosed the invention to others was \_\_\_\_\_  
The Disclosure being to ATTENDEES of CPG BRAINSTORM Session
4. Attach a copy of the first written description of the invention, if any. Diagrams & N  
Pg. 18, Pg. 19.
5. Attach copies of pertinent test and lab reports, if any. None
6. Does a model or prototype of the invention exist? No Attach photo, if available.
7. Has the invention been incorporated into a product shown or sold to ITW customers? No When and where first shown or sold? \_\_\_\_\_
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SLIDER Date of announcement or disclosure to the public of a product from such program N/A
10. Was the invention conceived or developed in a joint program with others outside the Company? No If was the joint program under written contract? \_\_\_\_\_

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# Slider Attachment Concept for TEES - ThermoForm Fill Seal Machines

2-up machine w/sliders on outsides



## Operations for typical zipper machine

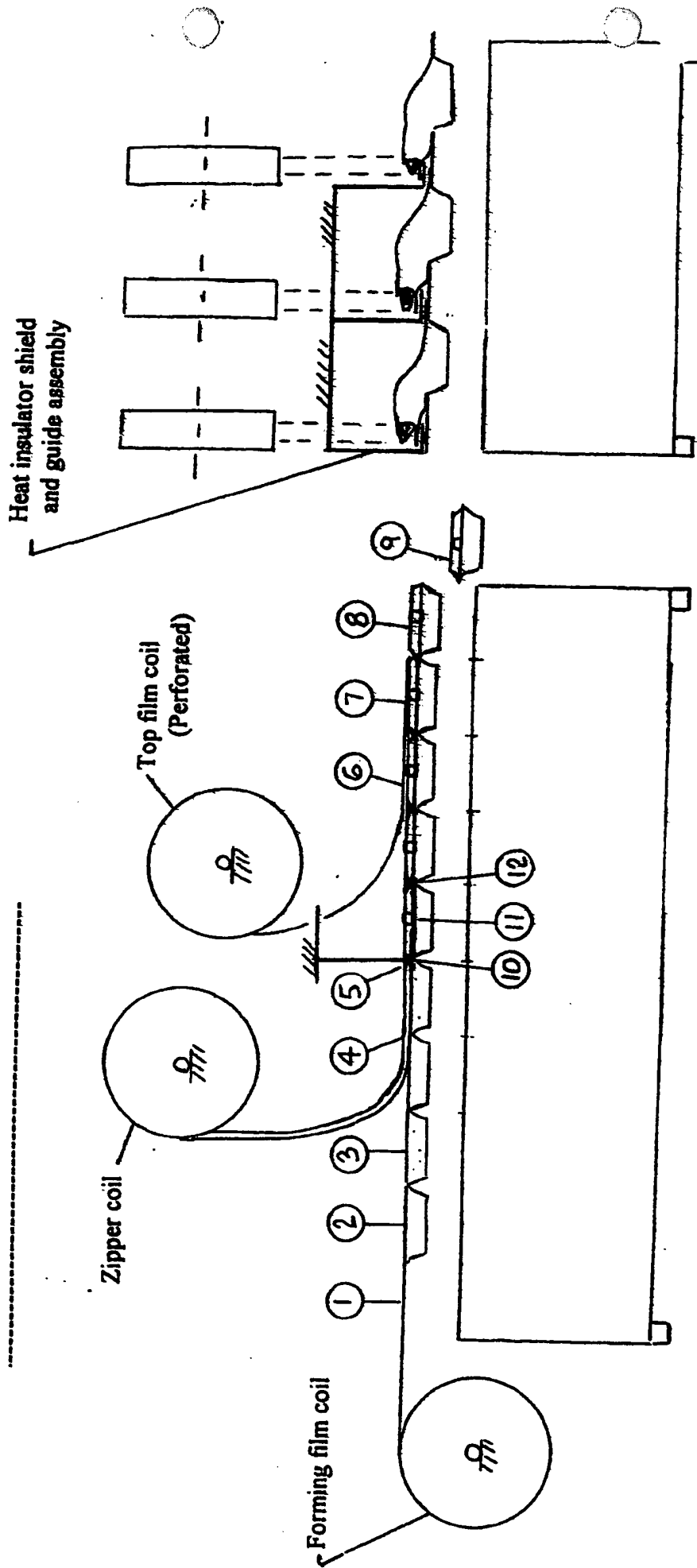
1. Heat forming film
2. Form forming film
3. Load product in formed film
4. Apply zipper to formed film
5. Stomp zipper
6. Enter top film
7. Perimeter sealing
8. Machine direction splitting

## Slider machine option #1

10. Insert sliders on zippers
11. End stomp and activate zipper

# Slider Attachment Concept for TFES - ThermoForm Fill Seal Machines

Multiple-up machine w/ sliders on same sides

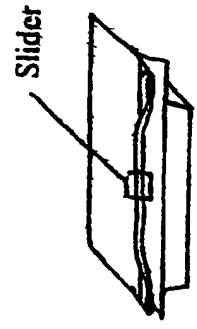


## Operations for typical zipper machine

1. Heat forming film
2. Form forming film
3. Load product in formed film
4. Apply zipper to formed film
5. Stomp zipper
6. Enter top film
7. Perimeter sealing
8. Machine direction splitting

## Slider machine option #2

10. Separate top perf film and provide heat shield with guide assembly
11. Insert sliders on zippers
12. End stomp and activate zipper



**ITW Technology Center**  
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**To:** Gerry Levy

**Date:**

**Fax #:**

**Pages: 3** (including cover sheet)

**From:** Mike McMahon

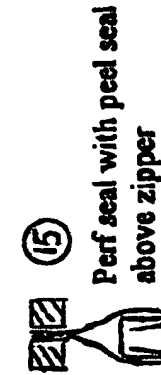
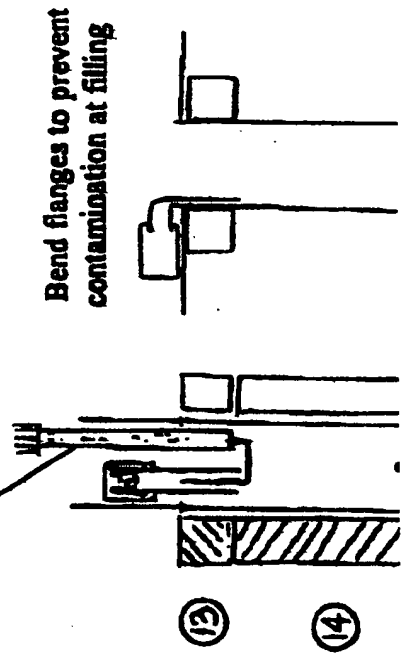
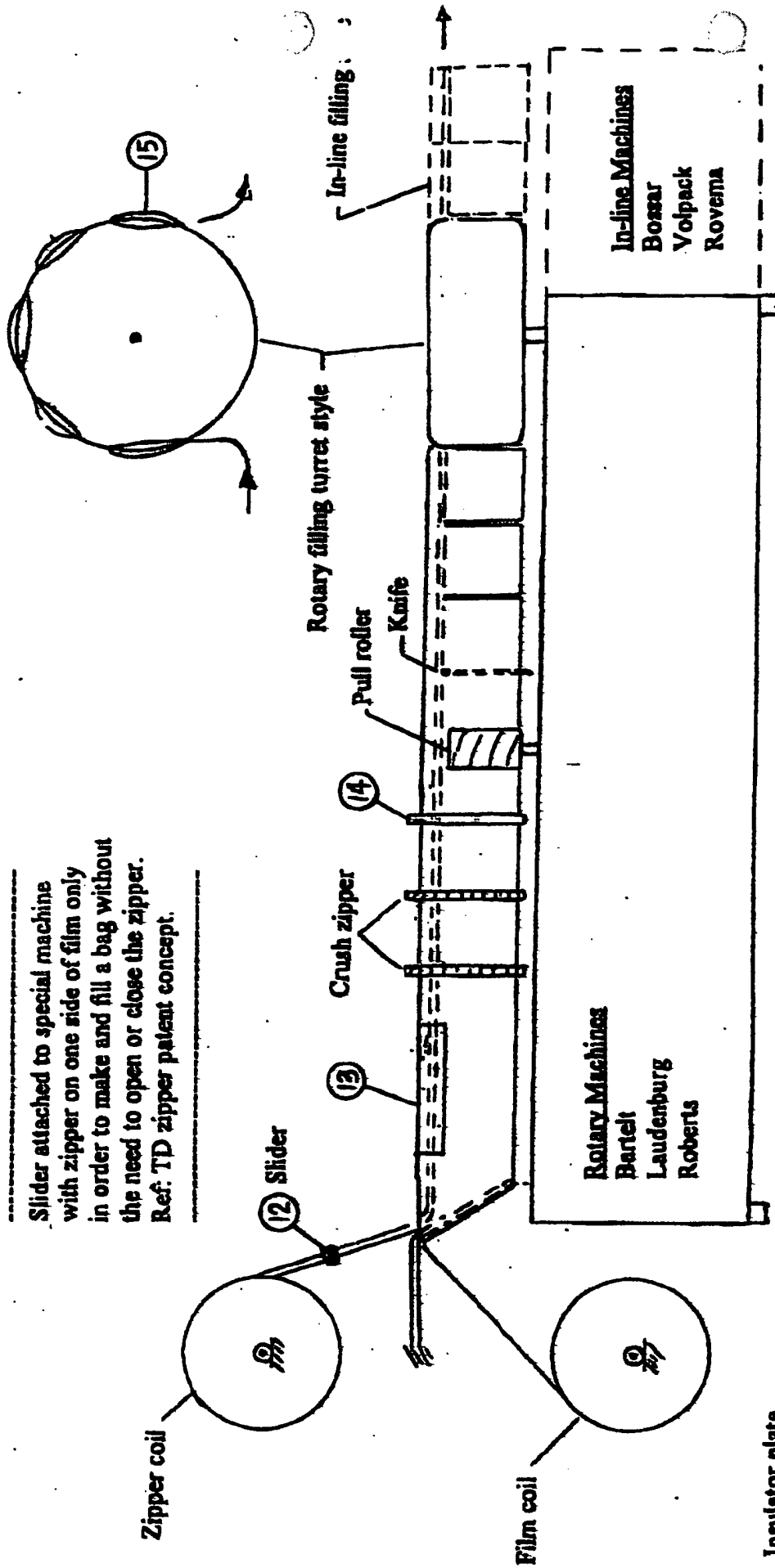
**Subject:**

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Corrections to 5 & 7

# Slider Attachment Concept for HVES- Horizontal form, Vertical Fill, Seal Machines

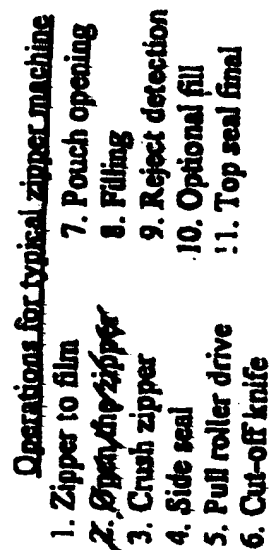
Slider attached to special machine with zipper on one side of film only in order to make and fill a bag without the need to open or close the zipper.  
Ref: TD zipper patent concept.



## Slider machine option #3

12. Slider insertion and actuation
13. Seal zipper to one side of film only
14. Side seal film only, not zipper
15. Seal film to other flange, side seal ears

**Slider attached to typical machine and opening zipper/bag from inside**



**Slider machine option #1**

12. Attach slider prior to folder plow
13. Move slider to open position between 4 & 5
14. Close slider positioning
15. Tamper evident seal



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